



Linde: Living healthcare

Linde Healthcare is committed to working with healthcare providers and regulatory authorities to continuously promote safe use of medical products and improve patient care. We provide medical gas products, therapies, technical solutions and services to hospitals, clinics, nursing facilities, emergency management services and home healthcare providers around the world. With our long experience and understanding of healthcare realities, you can depend on solutions that are delivered and serviced to the highest possible standards of quality, safety and efficacy.

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EXCIDIO® is a registered trademark of Linde AG.

→ EXCIDIO®

THE LINDE GROUP

Linde

EXCIDIO®.

Caring for the environment.
Integrated solution for
N₂O conversion.

Linde: Living healthcare

MED-743en-1204

A dose of relief. An assurance of safety.

While treatment with N₂O/O₂ mixtures is a valuable addition to pain management protocols, we understand the concerns you may have regarding the effects of N₂O exposure in the workplace and on the global environment. Linde is committed to ensure safety, well-being and comfort of all who administer N₂O.

EXCIDIO is a stand-alone device that has been specifically developed to provide additional flexibility where N₂O/O₂ mixtures for sedation/analgesia can be administered. It scavenges N₂O/O₂ mixtures exhaled by the patient and converts it into nitrogen and oxygen, eliminating any concerns regarding occupational exposure in the workspace.

Many existing scavenging solutions are tied to Waste Anesthetic Gas lines, and thereby restrict therapy use to dedicated areas within care facilities. EXCIDIO is a mobile solution that can be used in any treatment room, allowing for safe administration within hospitals and other care facilities or office-based areas. It does not require access to vacuum or Waste Anesthetic Gas pipe infrastructure.

Even if it is not classified as medical device, the design is following some essential safety requirements of the medical device directive. It can be safely used together with other medical devices.

Facts and figures.

- Small and mobile just-in-time conversion of N₂O into nitrogen and oxygen.
- Operates independently from vacuum or waste gas disposal systems.
- Highly efficient conversion rates (> 99 %) with no toxic output (NO_x, O₃).
- Quiet, cool and safe solid-state operation.
- CE marked in full compliance with IEC 60601 and developed in accordance with safety standards of the MDD (e.g. ISO 14791).

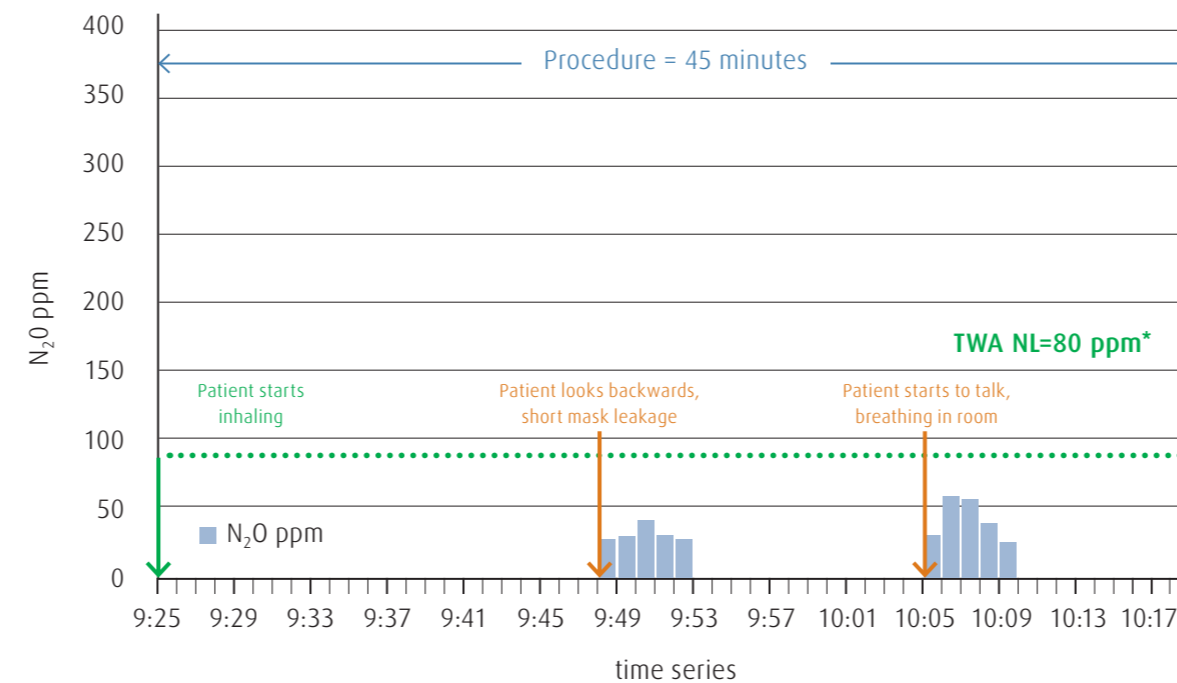
Tried and tested: EXCIDIO field test.

Field tests show that workplace contamination due to N₂O in non-ventilated treatment areas is virtually eliminated.

For best practice it is vital to ensure an optimal interface between the device and patient. Optimize the efficiency

of N₂O capture by using the right mask with the right fit to the patient. Patient movement can affect the seal of the mask and might be a source for leakage. It is important to provide a calm environment and look for patient reactions.

Excidio Field test: Record of N₂O concentrations in the air around treatment site during a 45 minutes procedure.



N₂O ppm measurement during a 45 minute obesity screening procedure in a 12-year old male patient undergoing blood sampling, venous line fixation and s.c. puncture. By courtesy of Dr. Piet Leroy Childrens hospital Maastricht.

*TWA= time-weighted average limit. The TWA in the Netherlands is 80 ppm - the world's lowest TWA.

Simple usage.



1. Start and stop of conversion
2. Start of warm-up phase / turn device off
3. Mute alarms

Operating parameters.

EXCIDIO utilizes very few moving parts and is therefore both highly reliable and quiet in operation (<45 Db).

EXCIDIO uses a catalyst material that must be heated to the appropriate temperature before conversion can occur. Initial heating time may take up to 40 minutes.

Once at temperature, the system automatically goes into standby mode meaning that it uses only minimal power to maintain the catalyst at the right temperature. Once initial

heating cycle is complete, the unit is available for immediate use as required.

Temperature of the exhaust gas is <50 Deg and surface temperature of the device is cool to touch.

The device must not be used in combination with volatile anaesthetics or in an environment where volatile anaesthetics might be present in the ambient air. The gas mixture shall not contain flammable anaesthetics.

Enlightened care.

Safe and robust, EXCIDIO requires minimal servicing. When needed, Linde Healthcare will arrange for the unit to be

transported to our service facility and a replacement unit substituted so that you are never without access to a device.